Six Thinking Hats: A pedagogical approach for cultivating cognitive abilities in education

Abstract:

Cognition is a fundamental human capacity that can be enhanced via deliberate effort and focused attention. Periodically, different educational bodies and policies acknowledge the significance of fostering critical thinking skills among pupils. The NEP 2020 also prioritizes cultivating students' innovative capacities and greater intellectual potential through education.The primary objective of this study is to present a distinctive teaching approach that facilitates the development of advanced cognitive abilities such as parallel thinking, lateral thinking, innovative thinking, and analytical thinking among students. The Six Thinking Hats concept, developed by Edward De Bono, provides a pragmatic approach to implementing diverse tasks. Explore various cognitive abilities with a simple, engaging, and efficient approach utilizing six metaphorical hats of different colors. The primary objective of this method is to guide the cognitive process into six distinct domains, individually promoting and improving concentrated thought.It enables individuals to examine issues, choices, alternatives, and opportunities in a structured, precise, and analytical manner. The Six Thinking Hats technique is commonly employed in the corporate management sector due to its effectiveness in addressing conflicts and identifying the best options. Promoting outstanding thinking, collaboration, and interaction offers multiple benefits for pupils, educators, and administrators. This study thoroughly analyzes the Six Thinking Hats technique and its advantages in a learning environment.

Keywords: Six Thinking Hats, Lateral Thinking, Thinking Skills.

Background of the study:

Though thinking is our most valuable resource, we can never be pleased. Weak intellectuals who believe thinking is for self-gratification are the most satisfied with their talents, regardless of their level of development (De Bono, 1995).

People rely on understanding to make sense of things, gather knowledge, investigate the issue, consider alternative perspectives, question their rigidity, determine their desires, make

a choice, etc. In the process of attempting to perceive things explicitly, the majority of real-world thought takes place.

One definition of creativity is that it converges on a single answer, making it more than just divergent ideas. It is just as important to ask the appropriate question as it is to find the correct answer; it does more than generate options; it also chooses among them (Young, 1985).

Sternberg and Lubert (1996) indicated that creativity involves problem-solving in personal and professional settings, innovative scientific discoveries, and community initiatives. Innovation requires perception and assessment, which both convergent and divergent thoughts can achieve.

Some writers have attempted to define what it is like to think creatively. For example, Gregory (2009) asserted that creative thinking is characterized by "flexibility, fluency, sensitivity to problems, originality, and the ability to evaluate, combine and rethink materials and problems and organize them coherently."

Developing pupils' thinking skills is a critical priority in Jordanian curricula. The Ministry of Education has held numerous seminars to enhance teachers' thinking skills in teaching. It is a novel and updated teaching method that has increased students' thinking levels.

The Jordanian Ministry of Education developed 'The Intel Teach Program' to enhance the efficiency of teachers, incorporate technology into lessons, and promote students' thinking skills. Figuring out solutions, logical thinking, and collaboration, this program improves higher cognitive skills by utilizing online technologies (Ministry of Education, 2006).

A mindful classroom, according to Beyer, 1997, fosters inquiry among pupils. A conscious classroom encourages students to think carefully and explore significant education. Students get inspired, utilized, and encouraged. Similarly, a thinking-kindly workplace should support, inspire, and stimulate employees to think and reason freely—this kind of workplace involves gathering data, assessment, testing, and information integration. Employees ask about protocols and activities, look, develop, and evaluate information, knowledge, and new conceptual frameworks and activities,thoroughly scrutinize ideas and ideas, and carefully evaluate their proof, logic, belief, and implicit.

The De Bono Hats system, commonly called the six hats or six thinking hats, is a cognitive tool used for group discussions and individual thinking. Paired with the concept of concurrent thinking and acting, which is closely linked to it, it offers a method for groups to think collectively with more efficiency and a method for organizing thinking processes in a thorough and unified manner (De Bono, 1999).

The six thinking hats approach and the mapmaking style originated from De Bone's perception method of understanding the brain's functioning. De Bono asserts that the brain functions as a dynamic and autonomous mechanism that organizes patterns. De Bono created the six thinking hats technique by effectively building upon this perceptual paradigm. The six hats establish six artificial constructs. Contexts for thinking can be added or withdrawn (De Bono, 1999). The act of changing hats redirects focus towards a different mindset.

Thinking encompasses several modalities, including scientific, subjective, unfavorable, optimistic, analytical, and innovative thinking. (De Bono, 1995) employed a palette of six

distinct colors to symbolize various thinking styles and devised the system known as the six thinking hats. Each thinking represents a distinct approach to thinking. The following explanations are provided:

What are the Six Thinking Hats?

The Six Thinking Hats refer to a method developed by Edward de Bono, which involves using several modes of thinking to approach a problem or situation.The various hats symbolize distinct cognitive functions of the human brain that the instructor or facilitator will deliberately activate during meetings or exercises.

De Bono delineated the subsequent six thinking hats:

Blue represents authority and administration.The system management hat is the blue hat. This headwear organizes the thoughts. Blue-hat thinking focuses on solutions, outputs, overviews, decisions, and summaries. When choosing a choice, it aids.

Blacksignifies prudence and is associated with pessimistic forecasts.To think critically, cautiously, and with extreme care is to wear a black hat. Reasoning is essential at all times. Negative evaluations of ideas, suggestions, topics, concepts, etc., are at the heart of black hat-thinking.

White represents impartiality, evidence, reason, and knowledge.The white hat covers information gaps, needs, and facts. It outlines how to get the necessary information about the subject.

Redis often associated with feelings, instincts, and inner sentiments.The red hat is for instinct, emotions, speculation, and sentiments. It recognizes moods and thoughts as

a significant aspect of reasoning. This red hat provides a simple method for a thinker to enter and exit the "transforming" phase.

Yellow represents an optimistic outlook, often associated with favorable forecasts.Positive evaluation and logical reasoning are at the heart of Yellow Hat. It can be utilized to anticipate the favorable outcomes of recommended deeds, principles, concepts, and advantages. In this way, it fosters "empathy," essential for creative problem-solving.

The color ***green*** symbolizes creativity and a free exchange of thoughts.New energy, alternatives, and ideas can be generated using the Green Hat. One of the cornerstones of green hat philosophy is the pursuit of alternatives. So, the green hat is crucial for thinking laterally and creatively. 'Thinking Beyond the Box' is the definition of lateral thinking.

Benefits of Six Thinking Hats:

As part of an organization's enduring endeavor to build and maintain high-quality operations, revisiting fundamental principles may be perceived as overly simplistic. However, that is where it should commence, particularly in conversations where concepts are brought into being.

The six thinking hats concept, first in 1986, has shown to be beneficial for organizations globally. What are the advantages of using the six thinking hats? Here are the primary factors when employing this cognitive approach can be advantageous.

Organization: Utilizing the six thinking hats technique facilitates a methodical approach to thinking. This is because every viewpoint is considered, facilitating the evaluation of information and eliminating superfluous details, thereby enhancing efficient decision-making.

Creativity:By assigning diverse roles to team members, each individual is empowered to analyze situations and propose innovative tactics to tackle them, surpassing conventional or basic approaches. Consequently, this facilitates businesses and individuals in evaluating their capabilities, acquiring further innovative concepts, and amalgamating diverse perspectives to generate novel ideas.

Productivity: People do more in less time since the strategy improves organizing and creative thinking skills. They are more empowered to work together because they know the

direction of discussion or problem-solving. So, the six thinking hats strategy encourages role-taking and accountability.

Quality decision-making:Establishing clear parameters for the debate within a group is crucial for minimizing conflict and fostering a proactive mindset. By addressing one perspective at a time, the group members can concentrate on each viewpoint individually before shifting to the next. This results in high-quality decisions facilitated by the beneficial influence of the process.

Inclusivity:By adopting a shared "hat" during the procedure, the group may set aside preconceived notions and collectively concentrate on one perspective. By minimizing conflicts and fostering a shared understanding, it is possible to ensure that everyone feels involved in the subject matter.

Interpersonal skills: Listening and communication abilities increase with the six thinking hats technique. Such an approach also makes people more persuasive when pitching ideas, more aware of when to support others, and more confident in their answers and dispute resolution.

When teaching students how to work together or addressing a company problem, the six thinking hats method is beneficial:

- Prompt creative, non-traditional solutions
- Develop an effective dynamic team.
- Instruct groups or pupils to view things from multiple perspectives.
- Participation from every student or team member should be encouraged and guaranteed.
- Raise the quality of collective decision-making.
- Promote an atmosphere where judgments are made with respect.
- Come up with fresh concepts and options.
- Acquire abilities to lead.
- Foster analytical thinking.
- Boost efficiency.

How do you use six thinking hats?

There is no need to adhere to a specific sequence or structure when facilitating a classroom exercise, group activity, or generating ideas workshop. Depending on the desired outcome, respondents can rearrange the sequence. For instance, if anyone aims to instruct and adopt a more enlightening methodology, he/she will allocate more time to the white hat compared to the other hats. If one desires to thoroughly address all potential risks and hazards associated with a particular choice, he/she will need to allocate additional time to consider the negative aspects. The red hat will have a more prominent presence if someone is interested in

individuals' instinctive responses. The green hat will dominate the discussions if the goal is to stimulate fresh ideas and foster innovation.

However, to the complexity of human thinking, combining the headwear will typically elicit more engaging and in-depth responses from people, whether they are trying to understand potential good or bad results or are investigating innovative concepts.

Significance of this theory in the educational field:

Creativity and the ability to think on one's feet in the face of challenges are more valuable than ever in this digital age. However, the cerebral process of thinking requires an environment conducive to it. Various representations of the same idea can be realized through media, such as visuals, sounds, or sensory substances. Most educational institutions have not recognized the significance of instructing advanced analytical abilities. The conceptual program solely fosters knowledge acquisition rather than cultivating innovative thinking abilities in learners. Irrespective of their intelligence levels, all persons can acquire the ability to think creatively through instruction. Perceptivity is an essential factor in fostering creative thinking. De Bono's Six Thinking Hats can be utilized to cultivate innovative ideas.Byacquiring the ability to think creatively, pupils can perform exceptionally in any domain. They develop cognitive abilities such as analysis, synthesis, assessment, identifying relationships, and summarizing to address everyday challenges effectively. Students develop autonomy in their thinking and cultivate self-assurance. Since hats come in many colors, visual representations facilitate knowledge acquisition.They can retain the topic matter for an extended duration.The six hats approach is helpful for educational leaders and instructors as much as it is for students. This method encourages students to consider issues from multiple angles, which in turn helps instructors structure their ideas in novel ways. Education leaders can assess whether or not a teacher's thought process during the teaching-learning process encourages students to think creatively. The Six Thinking Hats method is helpful for educational administrators for two reasons: first, as a tool to facilitate meetings, and second, as an approach for observing teachers (Kumari & Kumari, 2014).

Limitations of the Six Thinking Hats Approach to Education:

1. It requires exceptionally skilled educators.

2. Extensive preparations are required, including teaching students the utilization of the six thinking hats, equipping the hats with various colors, and picking specific topics that foster varied thoughts.

3. A congenial classroom environment is necessary as this approach relies on working together to learn.

4. It is not suitable for all topics, but only for those that require critical thinking and allow pupils to articulate their viewpoints.

5. It can be effective for specific skills, such as speaking, but less for other skills, like listening and reading.

Conclusion:The Six Thinking Hats technique is a straightforward, captivating, and efficient cognitive tool that enhances individuals' productivity, concentration, and mindful engagement.Use it to think independently, effectively, or in parallel to solve problems or generate ideas. Therefore, it can be utilized in any field of study to instruct certain subjects and cultivate cognitive abilities among pupils of all academic levels. The Hats enhance cognitive processes. The metaphorical headgear can be donned or removed as required.Hence, the Six Thinking Hats technique is a versatile instrument with numerous benefits in the field of education. NEP also aims to implement strategies that promote critical thinking in children, enabling them to become autonomous thinkers and lifelong learners. The Six Thinking Hats method satisfies all of these requirements and specifications. This is a curriculum component in certain Western countries, such as Venezuela. However, it is currently an opportune moment to implement this approach in Indian classrooms to cultivate and enhance critical thinking abilities while ensuring high-quality education across all educational levels.

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